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POLICY IMPLICATIONS OF INTERMETROPOLITAN  
MIGRATION FLOWS

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In the foreseeable future it appears that the greatest force molding the overall population distribution of the United States will not be, as is commonly supposed, the migration out of rural areas and small cities into metropolitan areas. Rather, the dominant force will be the migratory cross-currents among metropolitan areas. These areas, which already hold over two-thirds of the nation's population, grew by 16.5% in the 1960's, compared to 6.8% for the rest of the country. But their growth was largely (73%) from natural increase, while immigrants from non-metropolitan areas accounted for less than 12% of their increase. By contrast, 77% of net civilian immigration into this country ended in the metropolitan areas, accounting for 15% of their total growth -- a substantially greater portion of total increase than that of domestic migration. Thus metropolitan areas, which already dominate the national pattern of population distribution, grew primarily from their own natural increase and from direct immigration from abroad.

What is of interest here is how the population distributes itself among the set of metropolitan areas. Their growth varied widely in the 60's, from over 100% to a net loss. This was the result of great variations in their rates of natural increase and of migration. Natural increase in the 1960's varied astonishingly among metropolitan areas by a factor of 23, from 1.3% in Scranton, Pa., to 29.1% in Laredo, Texas. Similarly, 39% of them experienced a net outward migration in the 1960's, and even four of the largest ten were net losers in migratory exchanges.

In the past the relative variation in the growth rates of metropolitan areas was held down because they all shared in a greater migration from non-metropolitan areas and in the prevailing higher rates of natural increase. But now the importance of both these shared sources of growth is declining sharply, and without this cushion the migratory exchanges among metropolitan areas come to dominate the evolution of the national pattern of population distribution. With these common sources of growth much diminished, the relative variations in metropolitan growth rates will be greatly increased.

The magnitude of inter-metropolitan cross-flows is little realized. Although the 1970 Census data is not yet available, data for 1955-1960 can give a sense. In that period, metropolitan areas as a whole gained 1,220,000 through net domestic migration.<sup>1</sup> But this figure is the result of 12,400,000 departures from metropolitan areas and of 13,600,000 arrivals.<sup>2</sup> Everyone knows that the San Francisco area is a favored destination. Yet if departures from it had increased by only 15%, or arrivals decreased by 13%, San Francisco would have experienced no net migration. Metropolitan Los Angeles had a net immigration of 442,000; but this was the net result of 1,653,000 arrivals and departures. Pittsburgh had a net outmigration of 67,000, but 113,000 moved into Pittsburgh. Philadelphia's 12,000 migratory gain was 2% of the cross flows of that area. Comparable figures apply to small metropolitan areas, from Saginaw, Michigan to Savannah, Georgia.

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<sup>2</sup>These figures include movements among metropolitan areas and between these and the non-metropolitan remainder.

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small one as will leave the small one for the large one, all other things being equal.

But all other things are not equal. Migration flows are attracted more than proportionally to the per capita income of an area, and since larger metropolitan areas tend to have higher average incomes, they tend to receive more than proportionate flows. Yet our findings clearly indicate that this is the effect of income differences, rather than of an inherent tendency toward larger areas. Small metropolitan areas with high average incomes will have positive migration balances with respect to large metropolitan areas of lower incomes.

We find too that distance reduces the attraction of a destination and that good climate enhances it. We do not find that unemployment affects the rate of arrivals, but there is a negative feedback such that as the competition for the attractions and opportunities of a metropolis increases, many potential immigrants appear to be discouraged and go elsewhere. This self-regulating reduction of immigration probably accounts for the unimportance of unemployment.

These findings suggest some simple rules of thumb for a policy of growth centers in small or middle-sized metropolitan areas. First, it appears that income opportunities are far more important than size. In other words, high wages have more pull than the number of jobs. Second, that the location of the center should be near the population to be attracted. A metropolitan area of 200,000 which is 100 miles away has as much pull as one of 2,000,000 which is 1000 miles away. This applies not only to depressed and under-urbanized areas, but also to attempts to control the growth of large metropolises. Growth centers which are to serve as countermagnets should be near the large

metropolises where population pressure is to be relieved. We already see evidence of this process in the rapid growth of the smaller metropolitan areas within the national megapolitan constellations.

Third, that because of the negative feedback (and because outmigration increases with immigration, as will be discussed below), attempts to have centers grow very rapidly will be grossly inefficient as the rate of effective attraction will increase far more slowly than the inducements offered. And fourth, that a national growth centers policy must be mindful of the interplay between size, rate of growth, level of inducements, and the number of centers. Too few centers brought along under hot-house conditions will be wasteful, but a policy of too many centers with lukewarm support would be ineffective.

The rate at which people leave.

My tests on the 1955-1960 migration data show that the rate of outmigration decreases slightly with metropolitan size, which is to be expected because of the greater range of opportunities larger places afford. Whereas a warm climate is attractive, climate appears to play no role in the rate of leaving. In other words, migrants head toward warm climates, but do not appear to flee from cold ones. The rate of outmigration correlates strongly with the proportion of young people. This is to be expected, since it is mostly the young who move. The rate also increases with previous growth. This confirms the well-documented finding that migrants into an area are far more likely to move again than natives. The data also shows that metropolises which have a large number of relatively near-by attractive destinations have a higher rate of departures, and we have called this a "pull out" effect, which appears to have gone unnoticed in earlier studies.

None of these relations are surprising. The surprising finding is that neither low income nor high unemployment appear to correlate with outmigration. Indeed, higher incomes seem to increase outmigration. It is the absence of these traditional "push" variables which is startling and has profound policy implications. It almost seems as if a metropolitan area emits emigrants like some radioactive body, proportionally to its size (adjusted for age and proportion of habitual movers), but essentially unaffected by such environmental conditions as its economic well-being.

The implication of such a finding, if true, would greatly change the basis of national policy toward distressed areas. A cornerstone assumption of that policy, in this country as in others, is that economic distress leads to heavy outmigration, and that this inflicts upon the area of origin grave social costs as well as on the area of destination. Policies of investment in depressed areas have been based in large measure on an attempt to expand local economic opportunities and prevent economically-forced outmigration. In effect, they aim to provide people the freedom to stay in their own region.

But if my findings (and similar ones such as those of Lowry<sup>4</sup> and Lansing<sup>5</sup>) are correct, the picture changes radically. What seems to be heavy outmigration is then only a figment of statistical aggregation. The negative net migration of a declining area is the result of a shortage of immigrants, not of an excess of outmigrants. But no human being is a net migrant: people can come or they can go; the net is the arithmetic difference. Thus programs of development would not have the

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<sup>4</sup>Ira S. Lowry, Migration and Metropolitan Growth: Two Analytical Models, (San Francisco: Chandler Publishing Co., 1966).

<sup>5</sup>John B. Lansing and E. Mueller, The Geographic Mobility of Labor, Ann Arbor, Survey Research Center, Institute for Social Research, 1967.



effect of retaining the original inhabitants, but rather that of increasing the inflow of outsiders in to areas which typically already suffer from a labor surplus. Since population retention has played such a central role in national policies toward distressed areas, if this finding is correct we must rethink the objectives and the instruments of most regional policy.

Yet, precisely because of its potential policy importance, this finding should not be simply taken at face value. A number of recent authors have quite properly addressed themselves to determining whether Lowry's findings and mine are a statistical mirage. Unfortunately, this work is at present dispersed, largely unpublished, and not systematically related to policy issues. Although I shall review these studies critically, it is not to downplay their importance or their quality, but rather to convey some flavor of the difficulty of the inquiry and the importance of its implications for policy.

Lee D. Olvey, in a 1970 Harvard Ph.D. thesis<sup>6</sup>, objected that Lowry's failure to find a push from unemployment was the result of his examining this relation after the outmigration had taken place; Olvey argued that the real cause for outmigration would be the unemployment that would have occurred in the absence of outmigration. He constructed a measure of "prospective unemployment" for metropolitan areas, and found that it correlated very strongly with outmigration. The measure, in effect, set the natural increase of the area, plus its immigration, against its growth in jobs; that is, "prospective unemployment" was the gap between the increase in jobs and the potential increase in the supply of labor in the absence of outmigration.

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<sup>6</sup>Lee D. Olvey, "Regional Growth and Interregional Migration: Their Pattern of Interaction" Ph.D. Thesis, Department of Economics, Harvard University, 1970.

In spite of its common sense, the test is not conclusive, however. It may be that Olvey is simply relating outmigration to outmigration. Both in prosperous and distressed areas there is a close association between jobs and population. Thus, when the increase in jobs is taken out of what the population would have been without outmigration, one is left with something very much like outmigration, almost by definition. It is thus not surprising that the prospective unemployment would correlate with outmigration, since the relation is largely tautological. On this basis, it is very doubtful that this evidence shows that prospective unemployment causes outmigration.

Olvey also found that low wages accelerated outmigration; however this relation held only in one of his statistical experiments, and not in the others. Thus this relation is statistically weak.

Charles E. Trott's work<sup>7</sup> in the Bureau of Economic Analysis of the U.S. Department of Commerce is of particular interest because he uses the Social Security Continuous Work History Sample and Office of Business Economics Areas rather than Census materials and metropolitan areas, and because he looks at variations with age and with race. His most interesting finding is that outmigration appears to relate not to wages or income as such, but to the ratio of the area's expected wages (if national wage levels applied to the area's industrial structure) to the area's actual wages. That is to say, that the propensity to migrate depends not on low actual wages, but on how these wages compared with the national averages for that industry. He also found a relation of outmigration to the ratio of new labor force (new entrants into the labor force plus immigrants) to new jobs in the area, a measure similar to

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<sup>7</sup>Charles E. Trott, "Differential Responses in the Decision to Migrate," Bureau of Economic Analysis, U.S. Department of Commerce, mimeo, November, 1971.

Olvey's "prospective unemployment." Thus, wages and unemployment as push factors re-enter the picture. However, in my opinion, the finding is not a very certain one yet. It is beyond the scope of this paper to enter into detailed statistical arguments, but let me point out that these variables of expected wages and expected unemployment are elaborately synthetic ones, and that of necessity they require many rough approximations and implicit assumptions.

Trott's other findings are also of interest. He finds, for instance, that the proportion of workers in manufacturing accelerates outmigration. This creates some question in the consideration of national programs of job creation in distressed areas, which have stressed manufacturing development. In another paper<sup>8</sup>, Trott finds a surprising negative association of outmigration with the ratio of actual to expected employment. This seems to run counter to the prospective unemployment findings. He also finds that outmigration in fact increases with an earlier high rate of employment increase, a finding that may have to do with the foot-looseness of earlier migrants.

Edward Miller, of the Office of System Analysis and Information of the U.S. Department of Transportation, in two very recent and as yet preliminary studies focuses in some additional variables, principally the accelerating effects of education on outmigration and the roles as migrants of those born within or outside a state. (The outmigration rate of the latter is nearly three times that of those born in the state.) He finds<sup>9</sup>, for instance, that (using Census data) there is no

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<sup>8</sup> Charles E. Trott, "An Analysis of Outmigration," O.B.E., U.S. Department of Commerce, mimeo, August 1971.

<sup>9</sup> Edward Miller, "Determinants of Outmigration -- Why Study Outmigration" Office of Systems Analysis and Information, U.S. Department of Transportation, November, 1971.

direct association of income and outmigration. But when account is taken of some other variables, principally the number of out-of-staters and the level of education, low income becomes strongly associated with outmigration. Similarly, outmigration and job-formation at first appear unrelated, but job-creation appears to reduce outmigration significantly if other factors (such as immigration and education) are taken into account. The difficulty is that in the statistical forms in which job creation becomes significant, income stops playing a role. Yet when BLS data is substituted for Census data for some variables, both employment growth and high wages reduce outmigration as expected. But in none of his tests does unemployment register significantly.

Miller's other study<sup>10</sup> is of particular interest because he focuses on the outmigration of those born within a state. They are presumably the clients for those policies which aim to make it possible for people to earn a living without leaving their communities. Using Census data, he finds almost the perfect relation supporting the push hypothesis of migration. Outmigration is slowed by growth in jobs, is accelerated by education, reduced by income (although this variable is weak), and increased by unemployment. Using BLS data he finds about the same relation, except that low income is greatly strengthened as a push for outmigration; but unemployment drops out as a factor.

Let me try to put simply my conclusions from this brief review of where we stand on the matter of what determines outmigration. There is ample evidence that there is a strong mechanism at work here, but because the various factors are interrelated we cannot set out cause from

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<sup>10</sup>Edward Miller, "Out-migration Rates for Those Born Within a State," Office of Systems Analysis and Information, U.S. Department of Transportation, November, 1971.

effect. Until we understand these processes better, there is a good chance that our policies and programs may not only be wasteful or ineffective, but indeed counterproductive. Is there a push from low income or unemployment? The evidence here is murky, some finding one, some the other, some rather abstract versions of one or the other, some neither, and even in some cases a reverse effect. If there is no push from low wages and unemployment, present policies are wasteful in terms of retaining the present population, and possibly counterproductive if, by encouraging immigration, they accelerate outmigration.

But if there is a push, is it a push of too few jobs or of low wages, or both? Most of our present programs appear designed to develop jobs rather than to raise wages, and thus implicitly to vote for a job-gap theory. But the evidence is at least as strong that it is an income-gap which is at work. Yet trying to raise wages in an economically distressed area is a chancy proposition because perhaps their most usual principal comparative advantage is low-priced labor. If the income-gap is one in terms of money income, an area might raise its average wages by attracting high wage industries at wages slightly lower than the national average for that industry. But if the income gap is in terms of relative wages (as in Trott's findings), this would be just the wrong policy. In the long run, policies aimed at raising incomes must concentrate part of its efforts in human resource development (a vague term which means at least improvement of educational levels) to produce a people who is worth better wages and perhaps even able to generate some of its own development. Although education as a policy would appear to be like motherhood, it is a two-edged policy; for every study which has looked into it agrees that higher education leads to higher outmigration.

This brief exploration of the relation of migration flows and regional policy has obviously dealt with only a few of the many aspects of the realities of regional development and of the policies addressed to these issues. Yet the movement of people is what shapes the distribution of the national population and thus must be a central theme of any national territorial policy. I have tried to show that we are already learning some things which are directly useful for policy formulation, and that we are at the same time discovering those questions which must yet be answered to have effective and well-aimed policies. It is clear that we must continue the present national intensification of research on these matters, and that we must try to relate better the findings of such studies to issues of policy and of programs. At the same time, because of the many uncertainties we must make better use of policies and programs as learning tools than we do today. This means not only more follow-up studies as to the effectiveness of current programs, but, at least as importantly, to learn and rethink the purposes of policies and the objectives of programs. It is not only that we do not yet know what works, but that we do not yet know clearly what we want.

Finally, I want to raise an emerging but largely unrecognized situation in which these issues arise. This is the prospect that a great many metropolitan areas will have stable or declining populations a decade or so from now. Not just their central cities, but these areas as a whole. This is inevitable if we begin to approach zero population growth nationally. The lively interchange of migrants among metropolises is certain to continue. If the total population is fixed, gains and losses must balance out. Those losing in the net through migration will also face lower birth rates because there is a demographic multiplier

involved. Migrants are predominantly at the most fertile ages, and thus, if the national natural increase is near zero, areas that experience a net loss in the exchange of migrants will have the negative rates of natural increase since they will have a low proportion of the young.

This will be a new situation. Previous high rates of urbanization and of natural increase has insured that with rare exceptions all metropolitan areas grow in population. The few that have lost are economically troubled ones. But, unless there is a new reversal in birth rates, we will have dozens of reasonably prosperous metropolitan areas with shrinking populations. There is at present no serious work being done to identify the problems or opportunities that such a situation will present, and thus we are again likely to be caught unprepared. Indeed, virtually all of existing economic theory and empirical calibration of relations are geared to the phenomenon of growth. Yet the path of decline in population is not likely to be sliding back along the same track as that of previous growth. It is likely to follow a different path.

If economic growth continues at the same time that metropolitan population is shrinking, while still involving a substantial exchange of migrants, several interesting possibilities are open. The proportion of children in the population will decline more sharply than for the nation as a whole, and thus the fiscal pressure of educational costs at present standards will abate. This will be reinforced by the higher labor participation rate of the population because of the more top-heavy age structure. Welfare costs are not likely to be very different because even today migrants are no likelier to go on welfare than natives. New investment in urban infrastructure is likely to decline, since there is no need to accommodate future population. Similarly, the demand for

new housing will be reduced. In general, the construction industry should decline.

But on the other hand, the relative scarcity of labor suggests that there may be a tendency to substitute capital for labor, while the lightened load of education and added infrastructure costs may increase the propensity to save and thus increase the supply of capital available. The maintenance and use of the existing capital stock may acquire new importance. The housing stock in particular, is likely to see at the same time a deflation of values in central city property as well as suburban land. This may create sharp problems of adjustment. At the same time, the filtering process may deliver proportionately more housing to the lower income groups in the central cities that they will be better off in that respect. Yet this may present problems in terms of their access to jobs from their central locations and of the social integration of central city and suburbs because of the greater relative costs of new construction. Similarly, the rate of abandonment may increase.

More subtle questions are also likely to be important. For instance, what will be the consequences of such a situation for the economic rise of minorities? Recent studies show that their economic status is considerably higher in larger places<sup>11</sup>, and a recent opinion survey<sup>12</sup> indicates that they are more in favor of continued growth than the white population. Similarly, what will this do to the careers of the areas' young people? On the one hand, there will be fewer opportunities and more entrenched older persons, on the other hand there will be

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<sup>11</sup>For a useful review of this and related matters, see Peter A. Morrison, "The Impact and Significance of Rural-Urban Migration in the United States," The Rand Corporation, Santa Monica, P-4752, March, 1972.

<sup>12</sup>Unfortunately, this recent national survey at this writing still is not to be cited directly.



far fewer young people. And will social tranquility be greater? The crime rate appears lower in today's declining and low growth metropolitan areas<sup>13</sup>, but this may be the result of the low proportion of the young, who share disproportionately in crime. Most generally, will there be in these areas increased socio-economic integration as a result of reduced pressures, or will there be more rigidity in social stratification, less innovation, and more cut-throat competition?

The point here is not that the issues are likely to be dramatic. Indeed, prosperous population stability or slight decline seems at this distance like a comfortable middle age. Yet even that can have its problems, although they may be tragic. Given the likelihood that this will be the future of dozens of our metropolitan areas and tens of millions of our citizens it seems important that we do some anticipatory research and planning. Our present theories and rhetoric deal primarily with size. This derives on the theoretical side from the static equilibrium bias of most social science, and on the rhetoric side with the traditional utopianism of ideal size. But size and growth must be distinguished. Such theory and traditional rhetoric as we have on change deals with growth, since this has been our experience for two centuries of national life. A new rhetoric has arisen against growth, but it deals primarily with the need for stopping growth. The likelihood appears to be that in many cases population growth will stop or reverse spontaneously, and we should now anticipate the problems and opportunities of this in the near future.

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<sup>13</sup> Edgar Rust, "Metropolitan Non-Growth," Department of City and Regional Planning, University of California, Berkeley, March 1972.